



Iowa Governor's STEM Advisory Council

dedicated to building a strong STEM Education foundation for all Iowans

Iowa STEM Scale-Up Programs for 2012-2013

1. Title: **A World in Motion (AWIM)**
Contact: Chris Ciuca, SAE Foundation
Description: AWIM provides mathematics, science and technology curriculum and professional development to increase student performance, engagement and interest K-12 school students.
Website: <http://www.awim.org/>
2. Title: **Fabulous Resources in Energy Education (FREE)**
Contact: Pat Higby, Energy Education & Outreach Coordinator, University of Northern Iowa
Description: FREE allows anyone willing to educate about energy to borrow materials to teach about energy efficiency, energy basics, solar and wind energy, and hydrogen fuel cells.
Website: <http://www.uni.edu/free-ceee/>
3. Title: **FIRST Lego League**
Contact: Camille Sloan Schroeder, ISU Engineering K-12 Outreach, Iowa State University
Description: LEGO robotics competition for children creates an environment where young people discover the fun in STEM while building self-confidence, know-how and valuable employment and life skills.
Website: <http://www.isek.iastate.edu/fll/>
4. Title: **FIRST Tech Challenge**
Contact: Rebecca Whitaker, Director, K-12 Outreach, College of Engineering, University of Iowa
Description: FTC is a challenging exploration of real-world problems using robotics and STEM concepts (i.e. computer programming, center of gravity, trigonometry, algorithms, calculus).
Website: <http://www.engineering.uiowa.edu/ess/future-students/k-12/first-tech-challenge>
5. Title: **HyperStream** - Technology Hub for Iowa's Students
Contact: Leann Jacobsen, President, Technology Association of Iowa
Description: HyperStream is a program that partners education and business, combines a career awareness initiative with hands-on, real-world tech projects that students choose and develop. HyperStream is very focused on the project-based learning approach that education is prominently promoting moving forward.
Website: <http://hyperstream.org/>
6. Title: **iExploreSTEM**
(To be administered by each STEM Regional Manager. NOT FOR INDIVIDUAL SCALE-UP.)
Contact: Gina C. Schatteman, Faculty Emeritus, University of Iowa
Description: iExploreSTEM is a series of coordinated free, hands-on, science, technology, engineering and mathematics (STEM) festivals that have the look and feel of a street fair or county fair planned to be held annually throughout the State. With the assistance of the iExploreSTEM team, communities will build local partnerships representing a diversity of stakeholders to produce a local STEM festival scaled to the resources of the community.
Website: <http://www.iexplorestem.org/>

7. Title: **KidWind**
Contact: Jason Martin-Hiner, Science Improvement Facilitator, KidWind WindSenator, Keystone AEA
Description: The KidWind Challenge program in Iowa works with educators using WindWise Education curriculum in PD workshops, engages students in design and creates STEM interest and understanding at challenges or events, and connects teachers and students to careers related to wind power at the events.
Website: <http://learn.kidwind.org/>
8. Title: **Project HOPE** (Healthcare, Occupations, Preparation and Exploration)
Contact: Saba Ali, Associate Professor, University of Iowa
Description: Project HOPE (Healthcare, Occupations, Preparation, and Exploration) is a STEM-based curricular intervention that integrates academic and vocational opportunities designed to connect minority and low socioeconomic middle school students to the health science professionals early in their education including a curriculum designed for 8th grade science, career or social studies classes, teacher/counselor training, and parent workshops.
Website: <http://fyi.uiowa.edu/04/15/project-hope/>
9. Title: **The CASE for Agriculture Education in Iowa**
Contact: Joshua Remington, Executive Director, Iowa FFA Foundation
Description: CASE (Curriculum for Agriscience Education) hopes to increase STEM awareness and rigor and relevance of agriculture, food and natural resource subject matter through teacher professional development, student exposure to technology and a curriculum padded with 21st century skills, critical thinking and practice opportunities.
Website: <http://www.case4learning.org/>
10. Title: **State Science + Technology Fair of Iowa**
Contact: Andrea B. Spencer, State Science & Technology Fair of Iowa
Description: The SSTFI serves as a place where student researchers meet with professional researchers and communicate their findings from their own research or engineering projects and communicate their understanding of the research process.
Website: <http://www.sciencefairiowa.org/>
11. Title: **Partnership for Engineering and Educational Resources for Schools (PEERS)**
Contact: Martin Wesemann, Director of Advanced Technology, Pella Corporation - PEERS
Description: PEERS, a business-guided program divided into four implementation levels for students (exposure, experience, mentoring, and potential employment), is geared to increase awareness of STEM careers and to increase the number of engineering and technology majors and professionals in the state.
Website: <http://www.peersprogram.com/>
12. Title: **Corridor STEM Initiative (CSI) – Engineering is Elementary (EiE) Component**
Contact: Jim Thornton, Grant Wood Area Education Agency
Description: CSI intends to increase the number of Iowa students that enter and succeed in the Iowa workforce by engaging students in exciting, inquiry-based, hands-on STEM programs that extend the classroom learning experiences.
Website: <http://www.corridorstem.org/>

For additional Scale-Up Program Information, go to:
<http://www.iowastem.gov/stem-scale-programs-2012-2013>